

What is Claimed is:

1. A multi-layer wound dressing comprising:
 - a first absorbent layer containing the reaction product of a hydrophilic, ethylenically unsaturated monomer; and
 - a second absorbent layer in contact with the first absorbent layer and less absorbent of body fluids than the first absorbent layer.
2. The multi-layer wound dressing of claim 1, wherein the first absorbent layer comprises less than 10 percent by weight water prior to application to a patient.
3. The multi-layer wound dressing of claim 1, wherein the first absorbent layer is substantially insoluble in water.
4. The multi-layer wound dressing of claim 1, wherein the wound dressing is configured to be positioned on a patient's wound such that the second absorbent layer is between the first absorbent layer and the wound.
5. The multi-layer wound dressing of claim 1, wherein the first absorbent layer comprises the reaction product of the hydrophilic, ethylenically unsaturated monomer; an acrylic acid ester of a non-tertiary alcohol having 4 to 14 carbon atoms; and a polar, ethylenically unsaturated monomer.
6. The multi-layer wound dressing of claim 5, wherein the non-tertiary alcohol has from 6 to 12 carbon atoms.

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7. The multi-layer wound dressing of claim 5, wherein the first absorbent layer comprises the reaction product of about 30 to 100 parts by weight of the hydrophilic, ethylenically unsaturated monomer; about 0 to 30 parts by weight of the acrylic acid ester of a non-tertiary alcohol having from 4 to 14 carbon atoms; and about 0 to 40 parts by weight of the polar, ethylenically unsaturated monomer.
8. The multi-layer wound dressing of claim 5, wherein the first absorbent layer comprises the reaction product of about 50 to 80 parts by weight of the hydrophilic, ethylenically unsaturated monomer; about 5 to 30 parts by weight of the acrylic acid ester of a non-tertiary alcohol having from 4 to 14 carbon atoms; and about 10 to 30 parts by weight of the polar, ethylenically unsaturated monomer.
9. The multi-layer wound dressing of claim 1, wherein the second absorbent layer comprises the reaction product of an acrylic acid ester of a non-tertiary alcohol having from 4 to 14 carbon atoms; a hydrophilic, ethylenically unsaturated monomer; and a polar, ethylenically unsaturated monomer.
10. The multi-layer wound dressing of claim 9, wherein the second absorbent layer comprises the reaction product of about 45 to 80 parts by weight of the acrylic acid ester of a non-tertiary alcohol having from 4 to 14 carbon atoms; about 25 to 40 parts by weight of the hydrophilic, ethylenically unsaturated monomer; and about 2 to 20 parts by weight of the polar, ethylenically unsaturated monomer.
11. The multi-layer wound dressing of claim 1, wherein the first absorbent layer has an absorbency at least 100 percent greater than the absorbency of the second absorbent layer.

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12. The multi-layer wound dressing of claim 5, wherein the polar, ethylenically unsaturated monomer comprises N-vinyl acetamide.
 13. The multi-layer wound dressing of claim 5, wherein the polar, ethylenically unsaturated monomer comprises partially neutralized acrylic acid.
 14. The multi-layer wound dressing of claim 1, wherein the second absorbent layer has an absorbency of at least about 50 percent.
 15. The multi-layer wound dressing of claim 14, wherein the second absorbent layer has an absorbency of at least 80 percent.
 16. The multi-layer wound dressing of claim 14, wherein the second absorbent layer is substantially insoluble in water.

 17. The multi-layer wound dressing of claim 1, wherein the first absorbent layer has an absorbency of at least 200 percent.
 18. The multi-layer wound dressing of claim 1, wherein the dressing is substantially transparent.
 19. The multi-layer dressing of claim 1, wherein the dressing is cutable.
 20. The multi-layer wound dressing of claim 1, further comprising a wound-facing layer.

21. The multi-layer wound dressing of claim 20, wherein the wound-facing layer is perforated.
22. The multi-layer wound dressing of claim 1, wherein the second absorbent layer is adhesive.
23. A multi-layer wound dressing comprising:
a first absorbent layer containing the reaction product of a hydrophilic, ethylenically unsaturated monomer; and
a second absorbent, non-disintegrating layer in contact with the first absorbent layer.
24. The multi-layer wound dressing of claim 23, wherein the wound dressing is configured to be positioned on a patient's wound such that the second absorbent layer is between the first absorbent layer and the wound.
25. The multi-layer wound dressing of claim 23, wherein the first absorbent layer comprises a reaction product of the hydrophilic, ethylenically unsaturated monomer; an acrylic acid ester of a non-tertiary alcohol having 4 to 14 carbon atoms; and a polar, ethylenically unsaturated monomer.
26. The multi-layer wound dressing of claim 25, wherein the first absorbent layer comprises the reaction product of about 50 to 80 parts by weight of the hydrophilic, ethylenically unsaturated monomer; about 5 to 30 parts by weight of the acrylic acid

ester of a non-tertiary alcohol having from 4 to 14 carbon atoms; and about 10 to 30 parts by weight of the polar, ethylenically unsaturated monomer.

27. The multi-layer wound dressing of claim 23, wherein the first absorbent layer has an absorbency at least 100 percent greater than the absorbency of the second absorbent, non-disintegrating layer.

28. The multi-layer wound dressing of claim 23, wherein the second absorbent layer has an absorbency of at least 50 percent.

29. The multi-layer wound dressing of claim 23, wherein the second absorbent, non-disintegrating layer is adhesive.

30. A multi-layer wound dressing comprising:

a first absorbent layer having an absorbency of at least 200 percent and containing less than 10 percent by weight water before application to a patient; and a second absorbent layer having an absorbency of less than 50 percent of the absorbency of the first absorbent layer;

wherein the wound dressing is configured to be positioned on a patient such that the second absorbent layer is between the first absorbent layer and the wound.

31. The multi-layer wound dressing of claim 30, wherein the absorbency of the second absorbent layer is at least 50 percent.

32. The multi-layer wound dressing of claim 30, wherein the second absorbent layer is adhesive.

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33. The multi-layer wound dressing of claim 30, wherein the wound dressing is transparent.
34. The multi-layer wound dressing of claim 30, wherein the first absorbent layer has an absorbency of at least 400 percent.
35. The multi-layer wound dressing of claim 30, further comprising an apertured wound-facing layer with a first side in contact with the second absorbent layer and a second side containing an apertured wound-facing adhesive layer.
36. The multi-layer wound dressing of claim 30, further comprising a backing.
37. The multi-layer wound dressing of claim 30, wherein the dressing is cutable.

38. The multi-layer wound dressing of claim 30, wherein the first absorbent layer is from 10 to 50 mils thick.
39. The multi-layer wound dressing of claim 30, wherein the second absorbent layer is from 2 to 4 mils thick.
40. The multi-layer wound dressing of claim 30, wherein the first absorbent layer is from 2 to 15 times as thick as the second absorbent layer.
41. The multi-layer wound dressing of claim 30, wherein the first absorbent layer comprises the reaction product of about 5 to 30 parts by weight of an acrylic acid ester

of a non-tertiary alcohol having from 4 to 14 carbon atoms; about 50 to 80 parts by weight of a hydrophobic, ethylenically unsaturated monomer; and about 10 to 30 parts by weight of a polar, ethylenically unsaturated monomer.

42. The multi-layer wound dressing of claim 30, further comprising a wound-facing film having apertures having a total void area between 1 and 20 percent.

43. The multi-layer wound dressing of claim 42, wherein the wound-facing film has a void area between 4 and 10 percent.

44. The multi-layer wound dressing of claim 42, wherein the apertures have an average diameter less than the combined thickness of the first and second absorbent layers.

45. A body fluid absorbing material comprising the reaction product of:

less than about 68 parts by weight of an acrylic acid ester of a non-tertiary alcohol having from 4 to 14 carbon atoms;

greater than about 28 parts by weight of a hydrophilic, ethylenically unsaturated monomer; and

at least about 4 parts by weight of a partially neutralized ethylenically unsaturated carboxylic acid monomer.

46. The body fluid absorbing material of claim 45, wherein less than 50 percent of the carboxylic acid monomer is neutralized.

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47. The body fluid absorbing material of claim 45, wherein from 10 to 35 percent of the carboxylic acid monomer is neutralized.

48. The body fluid absorbing material of claim 45, wherein the acrylic acid ester comprises a methacrylic acid ester.

49. The body fluid absorbing material of claim 45, wherein the hydrophilic, ethylenically unsaturated monomer comprises methoxy poly(ethyleneglycol) acrylate.

50. The body fluid absorbing material of claim 45, wherein the partially neutralized carboxylic acid monomer comprises from about 4 to 30 parts by weight of the body fluid absorbing material.

51. The body fluid absorbing material of claim 45, wherein less than 40 mole percent of the carboxylic acid monomer is neutralized.

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52. The body fluid absorbing material of claim 45, wherein the carboxylic acid monomer is neutralized by a base containing sodium hydroxide, potassium hydroxide, lithium hydroxide, ammonium hydroxide, triethylamine, sodium ethoxide, sodium methoxide, or combinations thereof.

53. A body fluid absorbing material comprising the reaction product of:
less than about 68 parts by weight of an acrylic acid ester of a non-tertiary alcohol having from 4 to 14 carbon atoms;
greater than about 28 parts by weight of a hydrophilic, ethylenically unsaturated monomer; and

at least about 4 parts by weight of N-vinyl acetamide.

54. The body fluid absorbing material of claim 53, wherein the acrylic acid ester comprises a methacrylic acid ester.

55. The body fluid absorbing material of claim 53, wherein the hydrophilic, ethylenically unsaturated monomer comprises methoxy poly(ethyleneglycol) acrylate.

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